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ABSTRACT

With regard to the general statutes of North Carolina which require the approval of plans for new school buildings, this booklet outlines the procedures to be followed by local boards of education in securing a certificate of approval from the Division of School Planning of the State Department of Public Instruction for each school building project. This is interpreted to include new schools, additions to existing schools, and major renovations. Included is an outline of the procedures to be followed in obtaining the services of the Division of School Planning to inspect new construction projects. (FS)

ED037911

PROCEDURES

for Review and Approval of School
Building Plans and
for Inspection of Building Projects by

DIVISION OF SCHOOL PLANNING
N. C. Department of Public Instruction.

EF 002 644

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PROCEDURES

For Review and Approval of School Building Plans
For Inspection of Building Projects

Why? The General Statutes of North Carolina require that plans for new school buildings be approved by the State Superintendent of Public Instruction. This is interpreted to include new schools, additions to existing schools and major renovations.

The State Superintendent, who is the head of the State Department of Public Instruction, has designated the Division of School Planning of this Department to provide this review and approval service.

Who? The local board of education is responsible for obtaining this approval of plans. The board may delegate this duty to an authorized agent such as the superintendent, architect, or engineer.

How? Pages 2-7 of this booklet outline the procedures to be followed in securing the CERTIFICATE OF APPROVAL for each building project.

Page 8 of this booklet outlines the procedures to be followed in obtaining the services of the Division of School Planning to inspect new construction project.

General Statutes of North Carolina

Section 115-130. Erection and repair of schoolhouses. --The building of all new schoolhouses and the repairing of all old schoolhouses shall be under the control and direction of, and by contract with, the board of education in which such building and repairing is done. Boards of education shall not invest any money in any new building that is not built in accordance with plans approved by the State Superintendent as to structural and functional soundness, safety and sanitation, nor contract for more money than is made available for its erection. All contracts for buildings shall be in writing and all buildings shall be inspected, received, and approved by the county or city superintendent and the architect before full payment is made therefor: Provided, that this section shall not prohibit boards of education from repairing and altering buildings with the help of janitors and other regular employees of said board . . . . . .

EDUCATIONAL PROGRAM

Local school officials, under the leadership of the superintendent, should prepare educational specifications for each building project, or they should prepare some other written statement which outlines and describes the purposes and uses of the facilities to be planned and built.

ARCHITECTURAL PROGRAM

The architect, on the basis of these educational specifications, should prepare a written and graphic architectural program which sets forth his interpretations of the project.

CONFERENCES WITH DIVISION OF SCHOOL PLANNING

School officials, their architects and engineers are encouraged to confer with the Division of School Planning before preliminary architectural plans are begun or completed and before working drawings are started.

SUBMITTING PLANS

1. Submit to the Division of School Planning for review and approval sketches and drawings which shall include the drawings and other graphic and written information listed in items 1.00 to 3.07.

   Accompany them with
   PLAN TRANSMITTAL FORM SP-101
   See sample on page 9

   Send one set only, unless plans are to be forwarded by the Division of School Planning to other offices and agencies.

2. Obtain letter of comment from Division of School Planning before proceeding with Working Drawings and Specifications.

APPROVAL OF PLANS

Schematic Design and Design Development

GLOSSARY OF TERMS

Local school officials include the local school board, the superintendent and members of the central staff of the school administrator.

Educational specifications state the school planning problem in the client's terms. They are prepared by authorization of the local school officials under competent leadership by local personnel and consultants. Educational specifications are prepared primarily for the architect and engineer to be used as the basis for architectural programing and design. They describe the educational and related services to be accommodated by the facilities to be planned and built; they include statements about the intended use of the facilities and information about the activities to take place therein. Educational specifications are much more than a statistical chart of rooms needed and the area of each.

Facilities is the term used to include site, buildings and equipment. The term "equipment" includes attached items, movable equipment, furnishings, furniture, communication systems which are necessary for the use of the total school plant.

Architectural program reflects the architect's initial comprehension of the design problem given to him by the client. This is not a preliminary sketch for a building project, but it may include sketches and graphics as well as verbal statements which communicate the architect's response to the owner's statement of the planning problem.

Schematic Design Phase and Design Development Phase are terms used in the current form of agreement commonly used between owner and architect and are generally defined on the form. All basic decisions about a building plan and specifications should have been made at the completion of the Design Development Phase.

MATERIAL AND INFORMATION TO BE INCLUDED ON DRAWINGS IN SCHEMATIC DESIGN PHASE and DESIGN DEVELOPMENT PHASE

1.00 SITE MAP

This map is needed before planning of buildings is begun and shall be a part of the presentations during both these phases of planning.

1.01 Name of school project
1.02 Date of survey
1.03 Name of surveyor
1.04 North point and graphic scale
1.05 Bench marks
1.06 Dimensions for boundaries of site
1.07 Information about use and ownership of adjacent land
1.08 Existing roads and streets adjacent to or leading to the site, with indication whether or not they are paved
1.09 Existing roads, streets, and highways on the site, with indication about condition
1.10 Existing railroads
1.11 Existing contours, lakes, streams
1.12 Existing major tree masses, individual specimen trees, and other significant vegetation
1.13 Existing utilities: water, storm and sanitary sewer, electricity, gas, telephone
1.14 Indication of whether or not the site is located in a municipal watershed area
1.15 Results of sub-surface investigation if completed at this time
1.16 At existing schools, existing buildings with outline plan of main floor level showing floor elevations
1.17 At existing schools, appropriate date of construction of existing buildings
1.18 At existing schools, existing developed parking areas and play and athletic areas
1.19 At existing schools, existing water supply lines, overhead tanks, well location, sewage disposal system, storm drainage system

2.00 PLOT PLAN

Items 2.01 to 2.07 need not all be shown during Schematic Design Phase but should be included in Design Development Phase.

2.01 Location map, which shows site on map of city or county
2.02 Location of proposed structures, with indication of elevations of floor levels
2.03 Possible future construction
2.04 Location of new or changed play areas and athletic fields
2.05 New or changed roads, driveways, accesses, parking areas, whether or not they are part of the immediate project
2.06 Revised contours and grading
2.07 New or changed water supply, sewage disposal, storm drainage, electrical service

3.00 BUILDING PLANS

Items 3.01 to 3.07 need not all be shown during Schematic Design Phase but should be included in Design Development Phase

3.01 Floor plans--Scale: 1/16" - 1'0" or larger
3.02 Typical sections, showing construction, at appropriate scale
3.03 Typical elevations, at appropriate scale
3.04 Plans at the scale of 1/4" - 1'0" or larger for special rooms such as food service kitchen, science, homemaking, shops
3.05 Schedule of interior finishes
3.06 Description of mechanical systems, electrical systems and illumination, type of fuel, structural system
3.07 Results of sub-surface investigations

Construction Documents

Working Drawings and Specifications

SUBMITTING DOCUMENTS

1. Submit to the Division of School Planning for review and approval complete working drawings and specifications which shall include material listed in items 4.00 to 4.16, preferably in the form described in items 4.20 to 4.34 on page 5.

   . Accompany plans and specifications with PLAN TRANSMITTAL FORM SP-101.
   See sample on page 9

   . Transmit plans and specifications to the Division of School Planning before releasing them to contractors.

   . Allow the Division of School Planning at least two weeks for processing.

   . Do not release plans and specifications to contractors for bidding purposes until the CERTIFICATE OF APPROVAL has been issued.

The North Carolina General Statutes provide that no applicant shall have to submit the same plans for approval to more than one State agency. For public school building projects, that agency is the Division of School Planning.

Section 143-143-.1 Interdepartmental Building Regulation Committee. —(a) Creation; Membership.—There is hereby created an Interdepartmental Regulation Committee which shall be composed of seven members as follows: The head of the Division of Engineering of the Department of Insurance, the head of the Division of Sanitary Engineering of the State Board of Health, the head of the Division of Standards and Inspection of the Department of Labor, the head of the Division of School Planning of the Department of Public Instruction, the head of the Division of Engineering of the Budget Bureau, the head of the Division of Engineering of the Medical Care Commission, and a representative of the State Board of Public Welfare. Each member may formally designate, by written notice to the Chairman of the Interdepartmental Building Regulation Committee, a representative from his department who may exercise any and all of his powers as a member of the Committee, including the right to vote.

(b) First Meeting; . . .

(c) Meetings.— . . . .

(d) Powers and Duties. —The Interdepartmental Building Regulation Committee shall have the duty of establishing procedures for the interchange of plans among interested agencies and for the transmission to applicant of the approval or disapproval of each interested agency, to the end that no applicant shall have to submit the same plans for approval to more than one State agency, which agency shall act upon each application within a reasonable time; which time shall not exceed 30 days unless the said agency shall advise the applicant that additional time is necessary for more information.

REQUIREMENTS REGARDING MATERIAL AND INFORMATION TO BE INCLUDED

4.00 ON WORKING DRAWINGS:
4.01 Table of contents for set of drawings
4.02 Map showing location of school in city or county
4.03 Drawings and notes as complete as those which are issued to contractors for obtaining bids and for construction
4.04 Plans and specifications reviewed in terms of the MINIMUM CHECK LIST FOR MECHANICAL PLANS AND SPECIFICATIONS, issued by the Division of School Planning
4.05 Seals of architects and engineers, in accordance with General Statutes, Section 133-1.1a.

4.10 IN SPECIFICATIONS:
4.11 Table of contents
4.12 Notice to bidders
4.13 Instructions to bidders and General Conditions
4.14 Supplementary Conditions
4.15 Technical specifications as complete as those issued to contractors for bidding and construction
4.16 Proposal form

General Statutes of North Carolina

Section 133-1.1. Certain buildings involving public funds to be designed, etc., by architect or engineer. -(a) In the interest of public health, safety and economy, every officer, board, department or commission charged with the duty of approving plans and specifications or awarding or entering into contracts involving the expenditure of public funds in excess of twenty thousand dollars ($20,000.00) for the construction or repair of public buildings, or State-owned and operated utilities, shall require that such plans and specifications be prepared by a registered architect, in accordance with the provisions of chapter 83 of the General Statutes, or by a registered engineer, in accordance with the provisions of chapter 89 of the General Statutes, or by both architect and engineer, particularly qualified by training and experience for the type of work involved, and that the North Carolina seal of such architect or engineer together with the name and address of such architect or engineer, or both, be placed on all such plans and specifications.

RECOMMENDATIONS REGARDING FORM AND MANNER OF PRESENTING WORKING DRAWINGS AND SPECIFICATIONS

4.20 WORKING DRAWINGS:
4.21 Maximum size sheet: 30" x 42"
4.22 Each individual school project bound separately
4.23 Plans at scale large enough to be clear and legible

4.30 SPECIFICATIONS:
4.31 Outline and format which is generally accepted by N. C. Chapter of the American Institute of Architects and the construction industry
4.32 Different color paper for the several contracts, bound in the following order: general, construction, plumbing, mechanical, electrical, other
4.34 All addenda identified by project, by number, by date, and by contract (s)

STATE INSURANCE DEPARTMENT

2. Send two complete sets of working drawings and specifications to the Division of School Planning; one set will be forwarded by the Division to the North Carolina Insurance Department.

IMPORTANT NOTE: School officials, architects and engineers may transmit the necessary plans direct to:

Engineering Division
North Carolina Insurance Department
Box 351
Raleigh, North Carolina 27602

- Indicate on PLAN TRANSMITTAL FORM SP-101 how the plans are being transmitted to the Insurance Department.

- At existing schools, provide the Insurance Department with information about location and nature of existing buildings.

The General Statutes of North Carolina, in Section 58-193, require approval of school building plans by the State Insurance Department.

Section 58-193. Commissioner to inspect State property; plans submitted. -- . . . . No board, commission, superintendent, or other person or persons authorized and directed by law to select plans and erect buildings for the use of the State of North Carolina or any institution thereof, or for the use of any county, city, or incorporated town or school district shall receive and approve of any plans until they are submitted to and approved by the Commissioner of Insurance of the State as to the safety of the proposed buildings from fire, as well as the protection of the inmates in case of fire.

To assist in the enforcement of this requirement, the Division of School Planning approves building plans only after the plans have also been approved by the State Insurance Department.

The Engineering Division of the State Insurance Department reviews the plans which are submitted, and when acceptable, approves them. The Engineering Division sends letter of approval directly to the architect; a copy is sent to the Division of School Planning.

3. Send to the Division of School Planning two additional sets of working drawings and specifications for projects which involve school-owned water supply or sewage system, or both; these two sets which show this work will be forwarded by the Division to the N. C. State Board of Health.

IMPORTANT NOTE: School officials, architects and engineers may transmit the necessary plans direct to:

Chief, Engineering Section
Sanitary Engineering Division
State Board of Health
Raleigh, North Carolina 27602

- Indicate on PLAN TRANSMITTAL FORM SP-101 how plans are being transmitted to the State Board of Health.

- After approval by the State Board of Health, one set of plans will be delivered by that agency to the local or district representative of the State Board of Health.

Water supply and sewage disposal systems for schools must meet requirements of health authorities.

> Section 115-132. Likewise, it shall be the duty of said boards of education and boards of county commissioners to provide every school with a good supply of water, approved by the State Board of Health, and where such school cannot be connected to water carried sewerage facilities, there shall be provided sanitary privies for the boys and for the girls according to specifications of the State Board of Health. Such water supply and sanitary privies shall be considered an essential equipment of the school and are paid for. (1955, c. 1372, art. 15, s. 8.)

To expedite obtaining this approval, proceed thus:

- At existing schools:
  As soon as an addition is contemplated, notify the State Board of Health in Raleigh and request an investigation of existing water supply and sewage disposal. Health authorities can make their inspection while plans for the building project are being prepared. Give the health authorities at least the following information:
  - nature of proposed building additions
  - present and future expected enrollments

- At proposed sites for new schools:
  Request the State Board of Health to inspect proposed sites for new schools which will have a school-owned water supply or system sewage. After a site has been selected, request the State Board of Health to make recommendations for these systems. Give the Board of Health at least the following information:
  - kind of school to be built
  - number of students to be served immediately and in the future
  - brief description of the building project

Inspection of Building Projects 8

By Division of School Planning

The Division of School Planning provides a service to inspect public school building projects.

- Inspections by the Division of School Planning are required for all completed buildings which are built in whole or in part with State Funds. The final 10% of such State Funds cannot be released until a final inspection has been made by the Division.

- Any project, regardless of source of funds, which has been completed in accordance with the plans and specifications approved by the Division of School Planning should be inspected by a representative of the Division.

- Special inspections, such as an inspection while a project is still under construction, may also be requested from the Division of School Planning.

1. The architects and engineers whose professional services have been engaged by the local school officials and whose seals appear on the plans are required by North Carolina statutes to inspect the project and to issue certificates of acceptance. The final inspection by these architects and engineers should be made before the date of the final inspection by the Division of School Planning. The inspection services of the Division are intended to supplement the inspections required from the architects and engineers and not to substitute for them.

2. Requests for inspection should be made as far in advance as possible by the local school officials or their authorized agents. Requests should be directed to:

Division of School Planning
N. C. Department of Public Instruction
Raleigh, North Carolina 27602

Section 133-1.1. Certain buildings involving public funds to be designed, etc., by architect or engineer. -- . . . (b) On all projects requiring the services of an architect or engineer, or both, the architect or engineer or both whose names and seals appear on plans or specifications, shall inspect the construction, or repairs or installations, and based upon said inspection shall issue a signed and sealed certificate of compliance to the awarding authority that the contractor has fulfilled all obligations of such plans, specifications, and contract. No certificate of compliance shall be issued until the architect and/or engineer is satisfied that the contractor has fulfilled all obligations of such plans, specifications, and contract.

POLICIES, RULES AND REGULATIONS OF THE STATE BOARD OF EDUCATION GOVERNING THE EXPENDITURE OF THE $100,000,000 "STATE OF NORTH CAROLINA PUBLIC SCHOOL FACILITIES BONDS OF 1963"
(Adopted by State Board of Education, January 7, 1965)

I. Chapter 1079 of the General Statutes--1963--provides that:

B. Administration of Funds--"Funds received and disbursed under the provisions of this Act shall be administered by the State Board of Education and shall be used only for the purposes specified in this Act."

VI. Operating Procedures

Each county and city board of education making application for expenditure of State funds shall:

H. Procedures for disbursing, accounting, reporting State funds.

6. Reserve:

The Controller shall retain 10% of the funds allotted for each project as a reserve until the Division of School Planning files with him a report certifying that the completed project has been inspected and approved by a representative of that Division.

PLAN TRANSMITTAL FORM

SP-101

9

Instructions: Architects, engineers and school officials are asked to include original copy of this form, properly filled out, with each submission of plans and/or specifications. Please refer to DSP PROCEDURES publication. Yellow copy to school superintendent. Green copy for architect's or engineer's files.

Date_____196____

To: DIVISION OF SCHOOL PLANNING
N. C. Dept. of Public Instruction
Raleigh, North Carolina 27602

From: _____

_____

_____

PROJECT
Administrative
Unit_____

Name of school_____

Brief Description of Project_____

_____

For this project, we are sending _____Schematics

_____Design Development

_____Working Drawings

_____Specifications: Complete_____ General_____
Electrical_____
Mechanical_____
Other_____

_____We are sending you an extra set for forwarding to the STATE INSURANCE DEPARTMENT.

_____We are sending you two extra sets for forwarding to the STATE BOARD OF HEALTH.

_____We are sending one set direct to the STATE INSURANCE DEPARTMENT.

_____We are sending two sets direct to the STATE BOARD OF HEALTH.

_____These plans are based on educational specifications which have been submitted to you.

_____These plans are accompanied by a brief statement about the instructional program and the purposes of the project.

Signed_____

CC: Superintendent_____

Please send us a supply of this Form SP-101 in the following quantity:_____